

What is claimed is:

1. A method of reinforcing a native valve comprising attaching a reinforcing support to at least one valve leaflet, said support allowing a free edge of the at least one valve leaflet to form a seal with free edges of adjacent leaflets during diastole.
2. The method of claim 1 wherein attaching a reinforcing support to the at least one valve leaflet comprises attaching a reinforcing support to a downstream surface of the at least one valve leaflet.
3. The method of claim 1 wherein attaching a reinforcing support to the at least one valve leaflet comprises attaching a reinforcing support to an upstream surface of the at least one valve leaflet.
4. The method of claim 1 wherein attaching a reinforcing support to the at least one valve leaflet comprises attaching a reinforcing support to both an upstream surface and a downstream surface of the at least one valve leaflet.
5. The method of claim 4 wherein attaching a reinforcing support to both an upstream surface and a downstream surface of the at least one valve leaflet comprises sandwiching the at least one valve leaflet between adjacent support members on opposite sides of the at least one valve leaflet.
6. The method of claim 5 wherein sandwiching the at least one valve leaflet between adjacent support members on opposite sides of the at least one valve leaflet comprises sandwiching the at least one valve leaflet between adjacent, interlocking support members on opposite sides of the at least one valve leaflet.
7. A device useable to attach a support to a valve leaflet comprising:
a sheath;
a delivery mechanism slideably disposed within the sheath, said delivery mechanism constructed and arranged to carry at least one support,

whereby when said sheath is retracted to expose said delivery mechanism, said delivery mechanism is moveable such that the support is pressed against the valve leaflet.

8. The device of claim 7 wherein said delivery mechanism comprises at least one delivery arm pivotally attached to a carrier.
9. The device of claim 8 further comprising at least one activation string operably connected to said at least one delivery arm such that pulling said at least one activation string causes said at least one delivery arm to pivot.
10. A device useable to support a prolapsed valve leaflet, comprising:
a support;
an attachment mechanism, operably attached to the support member, and
useable to attach the support member to a prolapsed valve leaflet.
11. The device of claim 10 wherein said support comprises a first part pivotally connected to a second part.
12. The device of claim 11 further comprising a hinge pivotally connecting said first and second parts.
13. The device of claim 10 wherein said support comprises at least one elongate beam.
14. The device of claim 10 wherein said support comprises Nitinol.
15. The device of claim 10 wherein said support comprises an open network of support members.
16. The device of claim 10 wherein said support comprises a covered network of support members.
17. The device of claim 10 wherein said support comprises a substrate.

18. The device of claim 17 wherein said substrate is curved, forming a concave side and a convex side, the concave side facing a downstream direction when the device is attached to a prolapsed valve leaflet.
19. The device of claim 17 wherein said substrate is attachable to an upstream side of a prolapsed valve.
20. The device of claim 17 wherein said substrate is attachable to a downstream side of a prolapsed valve.
21. The device of claim 10 wherein said attachment mechanism comprises barbs.
22. The device of claim 10 wherein said attachment mechanism comprises staples.
23. The device of claim 10 wherein said attachment mechanism protrudes from an upstream side of said support.
24. The device of claim 10 wherein said attachment mechanism protrudes from a downstream side of said support.
25. The device of claim 10 wherein said support comprises an upstream member constructed and arranged for placement on an upstream side of a prolapsed valve leaflet, and a downstream member constructed and arranged for placement on a downstream side of the prolapsed valve leaflet.
26. The device of claim 25 wherein said attachment mechanism operably connects the upstream member to the downstream member, such that the prolapsed valve leaflet is sandwiched between the upstream member and the downstream member.
27. The device of claim 25 wherein said attachment mechanism comprises a magnetic field operably connecting the upstream member to the downstream member.